NORLITE, LLC

628 SO. SARATOGA STREET
PO BOX 684
COHOES, NY 12047
PHONE: (518) 235-0401
FAX: (518) 235-0233

September 12, 2013

Ms. Nancy Baker
Deputy Regional Permit Administrator
New York State Department of Environmental Conservation
Region 4
1130 North Westcott Road
Schenectady, NY 12306-2014 RETURN RECEIPT REQUESTED VIA EMAIL

Mr. Kenneth Eng
Air Compliance Branch
United States Environmental Protection Agency
Region 2
290 Broadway
New York, NY 10007-1866 RETURN RECEIPT REQUESTED VIA EMAIL

Re: Norlite Corporation-MACT Excessive Exceedances Report
Kiln 1: 08/21/13 – 09/10/13
Kiln 2: 08/21/13 – 09/10/13

Dear Sir/Madam:

In accordance with 40 CFR 63.1206(c)(3)(vi), the Norlite, LLC (Norlite) is submitting an "Excessive Exceedance Report" for the timeframe of 08/21/13 thru 09/10/13. The attached document explains each of the "malfunctions" for Kilns One and Two.

The results of the investigation concluded a majority of the waste feed cutoffs were a result of the span limit associated with the stack gas flow monitor. The majority of the cutoffs were caused by water droplets hitting the stack gas probe and causing artificially high flow rate readings. As stated previously, Norlite has been experiencing premature failure of the bags in the baghouse system and has been working with the manufacturer to find a resolution. An engineer from the manufacturer was onsite during the Kiln 1 shutdown which occurred on August 21, 2013. Kiln 2 was shutdown scrubber and baghouse maintenance starting on September 10, 2013. During this shutdown, bag and dust samples will be collected for further analysis to determine the cause of the premature failure of the bags. The number of bags failing is minor compared to the overall number of bags in the system but significant enough to cause plugging problems in the scrubber system. Norlite is expecting suggestions from the manufacturer shortly which will hopefully resolve this issue.

Norlite has been working on a project to help resolve stack gas span cutoffs in general for almost a year. Norlite has been working with the Department to install a new optical flow technology to monitor stack gas flow rate. A test unit has been installed on Kiln 1 and RATA tested to obtain additional information to be used in future calculations. Norlite is working to have the unit in Kiln 1 completely certified and approved for operation by the Fall of 2013. Before the unit can be certified and officially used at the kiln, Norlite and the Department must first work several operational parameters for the monitoring device. Norlite has presented data which was collected when the optical flow sensor had RATA testing done on it to start the discussion for these operational parameters. This data is being compared with RATA data collected at the same time on the current stack gas flow measuring technology. After final approval is given for the unit on

NORLITE, LLC

Kiln 1, Norlite will install a unit on Kiln 2 with an expedited schedule for completion which will hopefully see the unit in certified operation by late Fall or early Winter of 2013.

Norlite has also been working with the Department to improve LGF delivery and handling at the kilns to address these types of cutoffs. The Department has conditionally approved Norlite's plan to remove the minimum LLGF Line Pressure requirement, allow a positive displacement pump to be used for fuel flow control, and allow the use of a recirculation line for use during times when off LGF. The Department has requested a six month study be conducted without a minimum LLGF Line Pressure requirement. The study has been underway since May 01, 2103 and will be completed on October 31, 2013. Norlite is continuing to search for a positive displacement pump which will allow variable speed control, have tight pump tolerance, and have suitable reliability for long term use. Norlite will have a pump in place sooner but no later than December of 2013. Norlite will submit a final report to the Department in December 2013 detailing the findings from the study without a minimum LLGF Line Pressure. Norlite is hopeful to have final approval from the Department early 2014 for the positive displacement pump which is installed and for the final removal of the LLGF Line Pressure requirement. To further help develop a suitable fuel delivery system at the kilns, Norlite has enlisted the help of SPEC Engineering which specializes in process engineering and development. With addition of SPEC Engineering and the combustion expertise from Arcadis, Norlite is very hopeful to have a fully functional fuel delivery system at the kilns which will help reach a steady state operation.

All of the malfunctions that occurred were consistent with our Startup, Shutdown and Malfunction Plan (SSMP). As approved by the NYSDEC on February 6, 2006, these reports are being sent electronically.

Should you have any questions regarding this letter, please contact me at (518) 235-0401 or email at: tom.vanvranken@tradebe.com.

Sincerely,

Thomas Van Vranken

Thomas Van Vranken
Environmental Manager

Attachments

ecc: Don Spencer, NYDEC – R4 w/attachments
James Lansing, NYSDEC – CO w/attachments
Joseph Hadersbeck, NYSDEC – R4w/attachments
Jim Quinn, NYSDEC – R4 w/attachments
Tita LaGrimas – Tradebe

DCL: 2413

NORLITE, LLC
MACT EXCEEDANCE REPORT - KILN 1
08/21/13 - 09/10/13

Start Date	Start Time	End Date	End Time	Downtime	#	Event	Cause	Parameter	Limit	Corrective Action
8/22/2013	10:35:44	8/22/2013	10:36:04	0:00:20	151	Malfunction	During the kiln Heat Up On 08/22/13 From A Shutdown, the Corner of the Mist Pad Lifted Which Allowed Water Droplets to Contact the Stack Gas Probe and Cause the Instantaneous Upper Instrument Setpoint to be Reached for Stack Gas Span	Stack Gas Flow Rate	Span	After Investigations & Troubleshooting the Mist Pad Was Determined to be the Issue Which Was Repaired on 08/26/13
8/22/2013	10:36:12	8/22/2013	10:36:38	0:00:26	152	Malfunction	After A Shutdown, LGF Feed Was Only Established A Few Minutes Prior Which Made Flow Control With Valves Difficult	Front Kiln Pressure, 1 Second Delay	Opl	Third Party Process Engineers Are Reviewing the Feed System to Provide Fuel Delivery Improvements
8/22/2013	10:41:05	8/22/2013	10:43:17	0:02:12	153	Malfunction	During the kiln Heat Up On 08/22/13 From A Shutdown, the Corner of the Mist Pad Lifted Which Allowed Water Droplets to Contact the Stack Gas Probe and Cause the Instantaneous Upper Instrument Setpoint to be Reached for Stack Gas Span	Stack Gas Flow Rate	Span	After Investigations & Troubleshooting the Mist Pad Was Determined to be the Issue Which Was Repaired on 08/26/13
8/22/2013	10:44:07	8/22/2013	11:50:21	1:06:14	154	Malfunction	Previous Stack Gas Cutoff Caused System Instability Which Caused the CO's to Rise	Carbon Monoxide	Opl	Adjusted Fuel Flow
8/23/2013	20:04:01	8/23/2013	20:25:14	0:21:13	155	Malfunction	During the kiln Heat Up On 08/22/13 From A Shutdown, the Corner of the Mist Pad Lifted Which Allowed Water Droplets to Contact the Stack Gas Probe and Cause the Instantaneous Upper Instrument Setpoint to be Reached for Stack Gas Span	Stack Gas Flow Rate	Span	After Investigations & Troubleshooting the Mist Pad Was Determined to be the Issue Which Was Repaired on 08/26/13
8/24/2013	4:41:51	8/24/2013	4:43:29	0:01:38	156	Malfunction	The LGF Pump Started to Pulse Which Caused A Fuel Flow Surge Which Affected the Frontend Differential Kiln Pressure System	Front Kiln Pressure, 1 Second Delay	Opl	The Pump Pressure Was Adjusted to Stop the Pulsing
8/26/2013	6:50:43	8/26/2013	6:53:21	0:02:38	157	Malfunction	The Pilot Went Out Which Caused the Main Flame to Become Unstable And Start to Pulse. The Pulsing Affected the Frontend Differential Kiln Pressure	Front Kiln Pressure, 1 Second Delay	Opl	The Pilot Was Re-established to Stabilize the Main Flame
8/28/2013	1:41:10	8/28/2013	1:41:43	0:00:33	158	Malfunction	After A Shutdown, LGF Feed Was Only Established A Few Minutes Prior Which Made Flow Control With Valves Difficult	Front Kiln Pressure, 1 Second Delay	Opl	Third Party Process Engineers Are Reviewing the Feed System to Provide Fuel Delivery Improvements
8/28/2013	13:56:22	8/28/2013	14:04:54	0:08:32	159	Malfunction	The Sample Probe Was Coated With Baghouse Dust Which Caused the Instantaneous Upper Instrument Setpoint to be Reached for Scrubber pH Span	Scrubber pH	Span	I&E Cleaned the Probe and Calibrated It For Proper Operation
8/29/2013	0:55:11	8/29/2013	0:55:46	0:00:35	160	Malfunction	Water Droplets From the Mist Pad Contacted the Stack Gas Probe Which Caused the Instantaneous Upper Instrument Setpoint to be Reached for Stack Gas Span	Stack Gas Flow Rate	Span	The Mist Pad Rinse Water Was Turned Off

NORLITE, LLC
MACT EXCEEDANCE REPORT - KILN 1
08/21/13 - 09/10/13

Start Date	Start Time	End Date	End Time	Downtime	#	Event	Cause	Parameter	Limit	Corrective Action
8/29/2013	10:48:46	8/29/2013	10:49:03	0:00:17	161	Malfunction	The Operators Were Controlling Fuel Flow Using Valve Which Caused a Fuel Surge to Occur, Affecting the Frontend Differential Kiln Pressure	Front Kiln Pressure, 1 Second Delay	Opl	Third Party Process Engineers Are Reviewing the Feed System to Provide Operational Improvements
9/1/2013	6:05:44	9/1/2013	6:06:44	0:01:00	162	Malfunction	The Operators Were Controlling Fuel Flow Using Valve Which Caused a Fuel Surge to Occur, Affecting the Frontend Differential Kiln Pressure	Front Kiln Pressure, 1 Second Delay	Opl	Third Party Process Engineers Are Reviewing the Feed System to Provide Operational Improvements
9/9/2013	2:10:11	9/9/2013	2:14:04	0:03:53	163	Malfunction	Water Droplets From the Mist Pad Contacted the Stack Gas Probe Which Caused the Instantaneous Upper Instrument Setpoint to be Reached for Stack Gas Span	Stack Gas Flow Rate	Span	The Mist Pad Rinse Water Was Turned Off
9/9/2013	6:41:01	9/9/2013	7:01:06	0:20:05	164	Malfunction	Rinsing of the Mist Pad Caused Soda Ash Solids and Baghouse Dust to Collect On the Stack Gas Probe Which Caused the Instantaneous Upper Instrument Setpoint to be Reached for Stack Gas Span	Stack Gas Flow Rate	Span	I&E Cleaned the Probe and Inspected the Unit for Damage
9/9/2013	7:11:06	9/9/2013	7:37:43	0:26:37	165	Malfunction	Mist Pad Rinse Water Flow Rate Caused Soda Ash Solids and Baghouse Dust to Collect On the Stack Gas Probe Which Caused the Instantaneous Upper Instrument Setpoint to be Reached for Stack Gas Span	Stack Gas Flow Rate	Span	I&E Cleaned the Probe and Inspected the Unit for Damage
9/9/2013	7:46:52	9/9/2013	7:55:15	0:08:23	166	Malfunction	Water Droplets From the Mist Pad Contacted the Stack Gas Probe Which Caused the Instantaneous Upper Instrument Setpoint to be Reached for Stack Gas Span	Stack Gas Flow Rate	Span	The Mist Pad Rinse Water Was Turned Off
9/9/2013	9:54:41	9/9/2013	9:56:21	0:01:40	167	Malfunction	Water Droplets From the Mist Pad Contacted the Stack Gas Probe Which Caused the Instantaneous Upper Instrument Setpoint to be Reached for Stack Gas Span	Stack Gas Flow Rate	Span	The ID Fan Speed Was Reduced to Help Stop Water Droplet Movement Up the Stack
9/10/2013	15:46:08	9/10/2013	16:19:07	0:32:59	168	Malfunction	Mist Pad Rinse Water Flow Rate Caused Soda Ash Solids and Baghouse Dust to Collect On the Stack Gas Probe Which Caused the Instantaneous Upper Instrument Setpoint to be Reached for Stack Gas Span	Stack Gas Flow Rate	Span	I&E Cleaned the Probe and Inspected the Unit for Damage

NORLITE, LLC
MACT EXCEEDANCE REPORT - KILN 2
08/21/13 - 09/10/13

Start Date	Start Time	End Date	End Time	Downtime	#	Event	Cause	Parameter	Limit	Corrective Action
8/21/2013	14:24:23	8/21/2013	16:05:03	1:40:40	107	Malfunction	The Pilot Tripped Which Caused A Loss of the Main Flame Which Caused the CO's to Rise	Carbon Monoxide		Switched to Oil, Restarted the Pilot an Re-established the Main Burner Flame
8/22/2013	14:51:07	8/22/2013	14:51:31	0:00:24	108	Malfunction	I&E and Operations Troubleshot the Scrubber Blowdown and Recycle System Most of Day For Erratic Flows And Found the Main Water Line Control Valve to Be the Cause	Scrubber Recirc. Rate	Span	The Main Control Valve Was Replaced Which Established A Steady Water Flow to the Scrubber System
8/23/2013	14:48:36	8/23/2013	14:49:36	0:01:00	109	Malfunction	Water Droplets From the Mist Pad Contacted the Stack Gas Probe Which Caused the Instantaneous Upper Instrument Setpoint to be Reached for Stack Gas Span	Stack Gas Flow Rate	Span	The ID Fan Speed Was Reduced to Help Stop Water Droplet Movement Up the Stack
8/30/2013	1:23:30	8/30/2013	1:23:58	0:00:28	110	Malfunction	Water Droplets From the Mist Pad Contacted the Stack Gas Probe Which Caused the Instantaneous Upper Instrument Setpoint to be Reached for Stack Gas Span	Stack Gas Flow Rate	Span	The ID Fan Speed Was Reduced to Help Stop Water Droplet Movement Up the Stack
9/1/2013	1:57:25	9/1/2013	6:35:43	4:38:18	111	Malfunction	The Pilot Tripped Which Caused A Loss of the Main Flame Which Caused the CO's to Rise/Investigation for Low Venturi D.P.	Carbon Monoxide	Opl	Switched to Oil, Restarted the Pilot an Re-established the Main Burner Flame
9/6/2013	7:58:32	9/6/2013	11:11:49	3:13:17	112	Malfunction	Rinsing of the Mist Pad Caused Soda Ash Solids and Baghouse Dust to Collect On the Stack Gas Probe Which Caused the Instantaneous Upper Instrument Setpoint to be Reached for Stack Gas Span	Stack Gas Flow Rate	Span	I&E Cleaned the Probe and Inspected the Unit for Damage
9/10/2013	4:18:50	9/10/2013	4:19:29	0:00:39	113	Malfunction	Water Droplets From the Mist Pad Contacted the Stack Gas Probe Which Caused the Instantaneous Upper Instrument Setpoint to be Reached for Stack Gas Span	Stack Gas Flow Rate	Span	The ID Fan Speed Was Reduced to Help Stop Water Droplet Movement Up the Stack
9/10/2013	9:59:50	9/10/2013	12:31:43	2:31:53	114	Malfunction	Rinsing of the Mist Pad Caused Soda Ash Solids and Baghouse Dust to Collect On the Stack Gas Probe Which Caused the Instantaneous Upper Instrument Setpoint to be Reached for Stack Gas Span	Stack Gas Flow Rate	Span	Kiln Shutdown Started on 09/10/13 to Address Scrubber and Baghouse Issues